



SEP 12 2014

Mr. Erik Schutze Elk Corporation of Texas 6200 Zerker Road Bakersfield, CA 93263

Re: Notice of Minor Title V Permit Modification

District Facility # S-2033 Project # S-1133535

Dear Mr. Schutze:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued S-2033-13-16 and S-2033-14-16 into the Title V operating permit. The modifications are to correct the model number of the burners on the process heaters to the actual model number.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-2033-13-16 and S-2033-14-16, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely.

Arnaud Marjollet

**Director of Permit Services** 

**Enclosures** 

Gerardo C. Rios, EPA (w/enclosure) via email CC:

Seyed Sadredin

Executive Director/Air Pollution Control Officer

Northern Region 4800 Enterprise Way Modesto, ÇA 95356-8718 Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office) 1990 E. Gettysburg Avenue Fresno, CA 93726-0244 Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region 34946 Flyover Court Bakersfield, CA 93308-9725 Tel: 661-392-5500 FAX: 661-392-5585

## TITLE V APPLICATION REVIEW

Minor Modification Project #: S-1133535

Engineer: Dan Klevann

Date: September 4, 2014

Rivined by ASWRAGE

SEP 0 9 2014

Facility Number: S-2033

Facility Name: Elk Corporation of Texas

Mailing Address: 6200 Zerker Road

Bakersfield, CA 93263

Contact Name: Erik Schutze

Phone: 661-391-3986

Responsible Official: Erik Schutze

Title: Technical Department Supervisor

#### l. **PROPOSAL**

Elk Corporation of Texas (Elk) is proposing a Title V minor permit modification to incorporate the recently issued ATC's S-2033-13-16 and S-2033-14-16 into the Title V operating permit. The modifications are to correct the model number of the burners on the process heaters to the actual model number. There are no changes to the current permitted emissions.

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

#### 11. **FACILITY LOCATION**

6200 Zerker Road Shafter, CA 93263

#### 111. **EQUIPMENT DESCRIPTION**

S-2033-13-7: 12.0 MMBTU/HR NATURAL GAS OR LPG/PROPANE-FIRED PROCESS HEATER WITH A NORTH AMERICAN MODEL 4211-15/X3983 ULTRA LOW NOX BURNER AND FGR

**S-2033-14-7:** 12.0 MMBTU/HR NATURAL GAS OR LPG/PROPANE-FIRED PROCESS HEATER WITH A NORTH AMERICAN MODEL 4211-15/X3983 ULTRA LOW NOX BURNER AND FGR

### IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

### V. APPLICABLE REQUIREMENTS

District Rule 2520, <u>Federally Mandated Operating Permits</u> (Adopted June 21, 2001)

## VI. DESCRIPTION OF PROPOSED MODIFICATIONS

Elk is proposing to revise two process heater permit equipment descriptions to reflect the burners that were actually installed.

ATCs S-2033-13-4 and '-14-4 authorized the installation of North American Model 4211-14-LE burners; however, on a recent compliance inspection it was discovered that North American Model 4211-15/X3983 burners were installed.

Although the burners installed are not those that were authorized by ATCs S-2033-13-4 and '-14-4, maximum heat input and emission rates (heat input based daily and annual rates) will not change as a result of revising the equipment description.

#### S-2033-13-17:

Equipment description will be changed to reflect the correct model number of the burner. No other changes to the permit are proposed.

#### S-2033-14-17:

Equipment description will be changed to reflect the correct model number of the burner. No other changes to the permit are proposed.

### VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

- 1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
- 2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions:
- 3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
- 4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include;
  - A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
  - An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
- Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
- 6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including;

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- 2. The source's suggested draft permit; and
- 3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

### VIII. ATTACHMENTS

- A. Proposed Modified Title V Operating Permit No. S-2033-13-17 and -14-17,
- B. Authorities to Construct No. S-2033-13-6 and -14-6
- C. Application
- D. Previous Title V Operating Permit No.'s S-2033-13-5 and -14-5

# ATTACHMENT A

Proposed Modified Title V Operating Permit No. (S-2033-13-7 and '-14-7)

**PERMIT UNIT:** S-2033-13-7

XPIRATION DATE: 04/30/2017

**EQUIPMENT DESCRIPTION:** 

12.0 MMBTU/HR NATURAL GAS OR LPG/PROPANE-FIRED PROCESS HEATER WITH A NORTH AMERICAN MODEL 4211-15/X3983 ULTRA LOW NOX BURNER AND FGR

# PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The unit shall only be fired on PUC-regulated natural gas or LPG/propane. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 3. Emission rates from the natural gas or LPG/propane-fired unit shall not exceed any of the following limits: 15 ppmv NOx @ 3% O2 or 0.018 lb-NOx/MMBtu, 0.0076 lb-PM10/MMBtu, 200 ppmv CO @ 3% O2 or 0.15 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 4. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 5. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 6. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 7. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REPUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: ELK CORPORATION OF TEXAS Location: 6200 ZERKER RD, SHAFTER, CA 93263 S-2033-13-7: Sep 9 2014 2:38PM - KLEVANND

- 8. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 9. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 10. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 16. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. [District Rule 4320] Federally Enforceable Through Title V Permit
- 18. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 19. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 20. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: ELK CORPORATION OF TEXAS Location: 6200 ZERKER RD, SHAFTER, CA 93263 S-2033-13-7: Sep 9 2014 2:36FM - KLEVANND

**PERMIT UNIT:** S-2033-14-7

EXPIRATION DAITE P4/30/2017

**EQUIPMENT DESCRIPTION:** 

12.0 MMBTU/HR NATURAL GAS OR LPG/PROPANE-FIRED PROCESS HEATER WITH A NORTH AMERICAN MODEL 4211-15/X3983 ULTRA LOW NOX BURNER AND FGR

## PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The unit shall only be fired on PUC-regulated natural gas as the primary fuel with commercial LPG as a back-up fuel. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 3. This unit shall be fired on commercial LPG only during natural gas curtailments for no more than 168 cumulative hours in a calendar year plus 48 hours per calendar year for equipment testing. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 4. While fired on natural gas, emissions from the exhaust of this unit shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu; 200 ppmvd CO @ 3% O2; 0.0055 lb-VOC/MMBtu; or 0.0076 lb-PM10/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 5. While fired on commercial LPG, emissions from the exhaust of this unit shall not exceed any of the following limits: 0.018 lb-NOx/MMBtu; 0.148 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; or 0.0076 lb-PM10/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 6. The unit shall only be fired on PUC-regulated natural gas or LPG/propane. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 8. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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Facility Name: ELK CORPORATION OF TEXAS
Location: 6200 ZERKER RD, SHAFTER, CA 93263
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- 9. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 10. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 11. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 12. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 13. If the unit is fired on back-up fuel for a period exceeding 48 cumulative hours in a calendar year, the permittee shall monitor and record the stack concentration of NOx at least once during that year using an APCO approved portable NOx analyzer. Monitoring for back-up fuel NOx emissions shall not be required when the unit is operating on primary fuel, i.e. the unit need not be fired on back-up fuel solely to perform monitoring. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. Back-up fuel NOx emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 18. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 19. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 20. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: ELK CORPORATION OF TEXAS Location: 6200 ZERKER RD, SHAFTER, CA 93263 S-2033-14-7: Sep 9 2014 2:36PM - KLEVANND

- 21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 22. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. [District Rule 4320] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain records of: (1) the date and time of back-up fuel NOx measurements, (2) the measured back-up fuel NOx concentration (in ppmv or lb/MMBtu) corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 24. The permittee shall maintain records of the number of hours the unit operates while fired on commercial LPG. Records shall include the date, the number of hours of operation and the purpose of the operation (e.g., natural gas curtailment, equipment testing, etc.). [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 26. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 27. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: ELK CORPORATION OF TEXAS Location: 6200 ZERKER RD, SHAFTER, CA 93263 S-2033-14-7; Sep 9 2014 2:36PM - KLEVANND

# **ATTACHMENT B**

Authorities to Construct No. (S-2033-13-6 and '-14-6)





# **AUTHORITY TO CONSTRUCT**

**ISSUANCE DATE: 10/24/2013 PERMIT NO:** S-2033-13-6

LEGAL OWNER OR OPERATOR: ELK CORPORATION OF TEXAS

6200 ZERKER RD

MAILING ADDRESS:

SHAFTER, CA 93263

LOCATION:

6200 ZERKER RD SHAFTER, CA 93263

### **EQUIPMENT DESCRIPTION:**

MODIFICATION OF 12.0 MMBTU/HR NATURAL GAS OR LPG/PROPANE-FIRED PROCESS HEATER WITH A NORTH AMERICAN MODEL 4211-14-LE, ULTRA LOW NOX BURNER AND FGR: REVISE BURNER MODEL NUMBER TO READ 4211-15/X3983

## CONDITIONS

- The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- The unit shall only be fired on PUC-regulated natural gas or LPG/propane. [District Rules 2201 and 4320]
- Emission rates from the natural gas or LPG/propane-fired unit shall not exceed any of the following limits: 15 ppmv NOx @ 3% O2 or 0.018 lb-NOx/MMBtu, 0.0076 lb-PM10/MMBtu, 200 ppmv CO @ 3% O2 or 0.15 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306]
- The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month, [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

#### CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seved Sadredin, Executive Director / APCO



- 6. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 7. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 8. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 9. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0. [District Rules 4305, 4306, and 4320]
- 10. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 11. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
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- 13. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. [District Rule 4320]

- 19. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 20. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 21. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit





# **AUTHORITY TO CONSTRUCT**

**PERMIT NO:** S-2033-14-6

**ISSUANCE DATE: 10/24/2013** 

LEGAL OWNER OR OPERATOR: ELK CORPORATION OF TEXAS

MAILING ADDRESS:

6200 ZERKER RD SHAFTER, CA 93263

LOCATION:

6200 ZERKER RD SHAFTER, CA 93263

### **EQUIPMENT DESCRIPTION:**

MODIFICATION OF 12.0 MMBTU/HR NATURAL GAS OR LPG/PROPANE-FIRED PROCESS HEATER WITH A NORTH AMERICAN MODEL 4211-14-LE, ULTRA LOW NOX BURNER AND FGR: REVISE BURNER MODEL NUMBER TO READ 4211-15/X3983

# **CONDITIONS**

- The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- The unit shall only be fired on PUC-regulated natural gas as the primary fuel with commercial LPG as a back-up fuel. [District Rules 2201 and 4320]
- This unit shall be fired on commercial LPG only during natural gas curtailments for no more than 168 cumulative hours in a calendar year plus 48 hours per calendar year for equipment testing. [District Rules 2201, 4305, 4306, and 43201
- While fired on natural gas, emissions from the exhaust of this unit shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu; 200 ppmvd CO @ 3% O2; 0.0055 lb-VOC/MMBtu; or 0.0076 lb-PM10/MMBtu. [District Rules 2201, 4305, 4306, and 4320]
- While fired on commercial LPG, emissions from the exhaust of this unit shall not exceed any of the following limits: 0.018 lb-NOx/MMBtu; 0.148 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; or 0.0076 lb-PM10/MMBtu. [District Rules 2201, 4305, 4306, and 4320]
- The unit shall only be fired on PUC-regulated natural gas or LPG/propane. [District Rules 2201 and 4320] CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO



- 8. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 9. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 10. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 11. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 12. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0. [District Rules 4305, 4306, and 4320]
- 13. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 14. If the unit is fired on back-up fuel for a period exceeding 48 cumulative hours in a calendar year, the permittee shall monitor and record the stack concentration of NOx at least once during that year using an APCO approved portable NOx analyzer. Monitoring for back-up fuel NOx emissions shall not be required when the unit is operating on primary fuel, i.e. the unit need not be fired on back-up fuel solely to perform monitoring. [District Rules 4305, 4306, and 4320]
- 15. Back-up fuel NOx emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320]
- 16. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

- 18. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 19. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 20. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. [District Rule 4320]
- 24. The permittee shall maintain records of: (1) the date and time of back-up fuel NOx measurements, (2) the measured back-up fuel NOx concentration (in ppmv or lb/MMBtu) corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 25. The permittee shall maintain records of the number of hours the unit operates while fired on commercial LPG. Records shall include the date, the number of hours of operation and the purpose of the operation (e.g., natural gas curtailment, equipment testing, etc.). [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 26. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 27. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

# ATTACHMENT C

Application

. www.valleyair.org

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# Permit Application For:

ADMINISTRATIVE AMENDMENT	MINOR MODIFICATION	[ ] SIGNIFICANT MODIFICATION	
1. PERMIT TO BE ISSUED TO: GAF (E	ELK Corporation of Texas)		
2. MAILING ADDRESS:			
STREET/P.O. BOX: 6200Zerker Road			
CITY: Shafter	STATE: CA	9-DIGIT  ZIP CODE: 93263	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:		INSTALLATION DATE:	
STREET: 6200Zerker Road	CITY: Shafter		
% section 15 townshi	P 28S RANGE 26E		
4. GENERAL NATURE OF BUSINESS: Asphalt Roofing Manufacturing Company			
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary)			
S-2033-13-5: Modify the current equipment description to the following: 12 MMBTU/HR HEATEC MODEL HCI-8010-50-G NATURAL GAS OR LPG/PROPANE-FIRED PROCESS HEATER WITH A NORTH AMERICAN MODEL 4211-15/X3983 ULTRA LOW NOX BURNER			
S-2033-14-5: Modify the current equipment description to the following: 12 MMBTU/HR NATURAL GAS FIRED PROCESS HEATER WITH A NORTH AMERICAN MODEL 4211-15/X3983 ULTRA LOW NOx BURNER, AND A FLUE GAS RECIRCULATION			
		TITLE OF APPLICANT: Technical Department Supervisor	
7. SIGNATURE OF APPLICANT:	DATE:	PHONE: (661)391-3986	
Exit Soluto	F-27-13	FAX: (661)910-8038 EMAIL: ErikS@gaf.com	
For APCD Use Only:			
DATE STAMP	FILING FEE RECEIVED : \$	CHECK#:	

FACILITY ID:

DATE PAID:

Title V Modification S-2033-13-5, 14-5

AUG 2 7 2013 SJVAPCD Southern Region

# San Joaquin Valley Unified Air Pollution Control District

# **Certification of Truth and Accuracy**

Company Name: GAF (ELK Corporation of Texas)	Facility ID: S - 2033		
I declare, under penalty of perjury under the laws of the state of California that based on information and belief formed after reasonable inquiry, the statements and information provided in the document are true, accurate, and complete:			
Erik Schuto	F-27-13		
Signature of Responsible Official	Date		
Eric Schutze			
Name of Responsible Official (please print)			
Technical Department Supervisor			
Title of Responsible Official (please print)			

# ATTACHMENT D

Previous Title V Operating Permit No.'s S-2033-13-5 and '-14-5

**PERMIT UNIT: S-2033-13-5** 

**EXPIRATION DATE: 04/30/2017** 

#### **EQUIPMENT DESCRIPTION:**

12.0 MMBTU/HR HEATEC MODEL HCI-8010-50-G NATURAL GAS OR LPG/PROPANE-FIRED PROCESS HEATER WITH A NORTH AMERICAN MODEL 4211-14-LE ULTRA LOW NOX BURNER AND FGR

# PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The unit shall only be fired on PUC-regulated natural gas or LPG/propane. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Emission rates from the natural gas or LPG/propane-fired unit shall not exceed any of the following limits: 15 ppmv NOx @ 3% O2 or 0.018 lb-NOx/MMBtu, 0.0164 lb-SOx/MMBtu, 0.012 lb-PM10/MMBtu, 200 ppmv CO @ 3% O2 or 0.15 lb-CO/MMBtu, or 0.0027 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 4. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 5. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 6. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 7. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: ELK CORPORATION OF TEXAS Location: 6200 ZERKER RD, SHAFTER, CA 93263 S-2033-13-5: Sep 4 2014 4:41PM – KLEVANND

- 8. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 9. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 10. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 16. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit
- 18. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 19. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-2033-14-5

**EXPIRATION DATE: 04/30/2017** 

#### **EQUIPMENT DESCRIPTION:**

12.0 MMBTU/HR NATURAL GAS FIRED PROCESS HEATER WITH A NORTH AMERICAN MODEL 4211-14-LE, ULTRA LOW NOX BURNER, LPG AS A BACK-UP FUEL, AND A FLUE GAS RECIRCULATION

## PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The unit shall only be fired on PUC-regulated natural gas as the primary fuel with commercial LPG as a back-up fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. This unit shall be fired on commercial LPG only during natural gas curtailments for no more than 168 cumulative hours in a calendar year plus 48 hours per calendar year for equipment testing. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
- 4. While fired on natural gas, emissions from the exhaust of this unit shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu; 200 ppmvd CO @ 3% O2; 0.0027 lb-VOC/MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 5. While fired on commercial LPG, emissions from the exhaust of this unit shall not exceed any of the following limits: 0.018 lb-NOx/MMBtu; 0.148 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0066 lb-PM10/MMBtu; or 0.0166 lb-SOx/MMBtu. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
- 6. If the unit is fired on back-up fuel for a period exceeding 48 cumulative hours in a calendar year, the permittee shall monitor and record the stack concentration of NOx at least once during that year using an APCO approved portable NOx analyzer. Monitoring for back-up fuel NOx emissions shall not be required when the unit is operating on primary fuel, i.e. the unit need not be fired on back-up fuel solely to perform monitoring. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 7. Back-up fuel NOx emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 8. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: ELK CORPORATION OF TEXAS Location: 6200 ZERKER RD, SHAFTER, CA 93263 S-2033-14-5: Sep 4 2014 4:41PM - KLEVANND

- 9. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 10. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 14. VOC emissions for source test purposes shall be determined using EPA Method 25A or 25B, or ARB Method 100. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 19. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

- 21. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain records of: (1) the date and time of back-up fuel NOx measurements, (2) the measured back-up fuel NOx concentration (in ppmv or lb/MMBtu) corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain records of the number of hours the unit operates while fired on commercial LPG. Records shall include the date, the number of hours of operation and the purpose of the operation (e.g., natural gas curtailment, equipment testing, etc.). [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 24. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit
- 25. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 26. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit